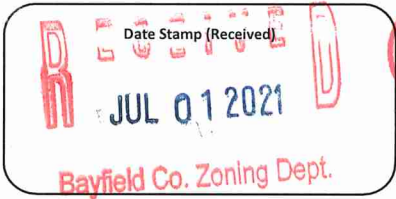


SUBMIT: COMPLETED APPLICATION, TAX STATEMENT AND FEE TO:
Bayfield County
Planning and Zoning Depart.
PO Box 58
Washburn, WI 54891
(715) 373-6138

APPLICATION FOR PERMIT
BAYFIELD COUNTY, WISCONSIN



Permit #:	21-0243
Date:	7-29-21
Amount Paid:	7-1-21 175.00 check
Refund:	

INSTRUCTIONS: No permits will be issued until all fees are paid.
Checks are made payable to: Bayfield County Zoning Department.

DO NOT START CONSTRUCTION UNTIL ALL PERMITS HAVE BEEN ISSUED TO APPLICANT.

Original Application MUST be submitted

FILL OUT IN INK (NO PENCIL)

TYPE OF PERMIT REQUESTED →		<input type="checkbox"/> LAND USE		<input type="checkbox"/> SANITARY		<input type="checkbox"/> PRIVY		<input type="checkbox"/> CONDITIONAL USE		<input type="checkbox"/> SPECIAL USE		<input type="checkbox"/> B.O.A.		<input type="checkbox"/> OTHER	
Owner's Name: Robert Arquette and Nancy Hanson				Mailing Address: 73900 Lake Shore Dr				City/State/Zip: Washburn, WI 54891				Telephone: Cell Phone: 715 292-8030			
Address of Property: 73900 Lakeshore Dr				City/State/Zip: Washburn WI 54891											
Contractor: Bay Area Environmental Consulting LLC				Contractor Phone: 608-726-0151				Plumber: NA				Plumber Phone:			
Authorized Agent: (Person Signing Application on behalf of Owner(s)) na				Agent Phone: na				Agent Mailing Address (include City/State/Zip): na				Written Authorization Attached <input type="checkbox"/> Yes <input type="checkbox"/> No			
PROJECT LOCATION		Legal Description: (Use Tax Statement)				Tax ID# 56 55				Recorded Document: (Showing Ownership) 2019 R 578450					
1/4, 1/4		Gov't Lot 1		Lot(s)		CSM		Vol & Page		CSM Doc #		Lot(s) #		Block #	
Section 18		Township 48		N, Range 04		W		Town of: Sarksdale		Lot Size		Acreage 2.09			

<input checked="" type="checkbox"/> Shoreland	<input type="checkbox"/> Is Property/Land within 300 feet of River, Stream (incl. Intermittent) Creek or Landward side of Floodplain? If yes---continue →	Distance Structure is from Shoreline : _____ feet	Is your Property in Floodplain Zone? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are Wetlands Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	<input checked="" type="checkbox"/> Is Property/Land within 1000 feet of Lake, Pond or Flowage If yes---continue →	Distance Structure is from Shoreline : _____ feet		
<input type="checkbox"/> Non-Shoreland				

Value at Time of Completion * include donated time & material \$ 20,000	Project	Project # of Stories	Project Foundation	Total # of bedrooms on property	What Type of Sewer/Sanitary System(s) Is on the property or Will be on the property?	Type of Water on property
	<input checked="" type="checkbox"/> New Construction	<input type="checkbox"/> 1-Story	<input type="checkbox"/> Basement	<input type="checkbox"/> 1	<input type="checkbox"/> Municipal/City	<input type="checkbox"/> City
	<input type="checkbox"/> Addition/Alteration	<input type="checkbox"/> 1-Story + Loft	<input type="checkbox"/> Foundation	<input type="checkbox"/> 2	<input type="checkbox"/> (New) Sanitary Specify Type:	<input checked="" type="checkbox"/> Well
	<input type="checkbox"/> Conversion	<input type="checkbox"/> 2-Story	<input type="checkbox"/> Slab	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> Sanitary (Exists) Specify Type: HOLDING TANKS	<input type="checkbox"/>
	<input type="checkbox"/> Relocate (existing bldg)	<input checked="" type="checkbox"/> NA	<input checked="" type="checkbox"/> NA	<input type="checkbox"/>	<input type="checkbox"/> Privy (Pit) or <input type="checkbox"/> Vaulted (min 200 gallon)	
	<input type="checkbox"/> Run a Business on Property	<input checked="" type="checkbox"/> rain garden	<input checked="" type="checkbox"/> Use	<input type="checkbox"/> None	<input type="checkbox"/> Portable (w/service contract)	
	<input type="checkbox"/>		<input checked="" type="checkbox"/> Year Round	<input type="checkbox"/>	<input type="checkbox"/> Compost Toilet	
					<input type="checkbox"/> None	

Existing Structure: (if addition, alteration or business is being applied for)	Length:	Width:	Height:
Proposed Construction: (overall dimensions)	Length:	Width:	Height:

Proposed Use	✓	Proposed Structure	Dimensions	Square Footage
<input checked="" type="checkbox"/> Residential Use	<input type="checkbox"/>	Principal Structure (first structure on property)	(X)	
	<input type="checkbox"/>	Residence (i.e. cabin, hunting shack, etc.)	(X)	
		with Loft	(X)	
		with a Porch	(X)	
		with (2nd) Porch	(X)	
		with a Deck	(X)	
<input type="checkbox"/> Commercial Use		with (2nd) Deck	(X)	
		with Attached Garage	(X)	
<input type="checkbox"/> Municipal Use	<input type="checkbox"/>	Bunkhouse w/ (<input type="checkbox"/> sanitary, or <input type="checkbox"/> sleeping quarters, or <input type="checkbox"/> cooking & food prep facilities)	(X)	
	<input type="checkbox"/>	Mobile Home (manufactured date)	(X)	
	<input type="checkbox"/>	Addition/Alteration (explain)	(X)	
	<input type="checkbox"/>	Accessory Building (explain) grading Pond 1	(30 X 46)	1380
	<input type="checkbox"/>	Accessory Building Addition/Alteration (explain) grading Pond 2	(10 X 40)	400
	<input type="checkbox"/>	Special Use: (explain) Approximate Sidewalk	(60 X 3)	180
	<input type="checkbox"/>	Conditional Use: (explain) (2) Approximate Channel drains	(40 X 3)	120
	<input checked="" type="checkbox"/>	Other: (explain) Rain garden, driveway drains, contouring	(X)	reference

FAILURE TO OBTAIN A PERMIT or STARTING CONSTRUCTION WITHOUT A PERMIT WILL RESULT IN PENALTIES
I (we) declare that this application (including any accompanying information) has been examined by me (us) and to the best of my (our) knowledge and belief it is true, correct and complete. I (we) acknowledge that I (we) am (are) responsible for the detail and accuracy of all information I (we) am (are) providing and that it will be relied upon by Bayfield County in determining whether to issue a permit. I (we) further accept liability which may be a result of Bayfield County relying on this information I (we) am (are) providing in or with this application. I (we) consent to county officials charged with administering county ordinances to have access to the above described property at any reasonable time for the purpose of inspection.

Owner(s): Na Hanson, Robt Arquette
(If there are Multiple Owners listed on the Deed All Owners must sign or letters of authorization must accompany this application)

Date 6-30-21

Authorized Agent: _____
(If you are signing on behalf of the owner(s) a letter of authorization must accompany this application)

Date _____

Address to send permit 73900 Lakeshore Drive Washburn 54891

Attach
Copy of Tax Statement

If you recently purchased the property send your Recorded Deed

Original Application MUST be submitted

In the box below: **Draw or Sketch your Property** (regardless of what you are applying for)

Fill Out in Ink – **NO PENCIL**

- (1) Show Location of:

Proposed Construction
- (2) Show / Indicate:

North (N) on Plot Plan
- (3) Show Location of (*):

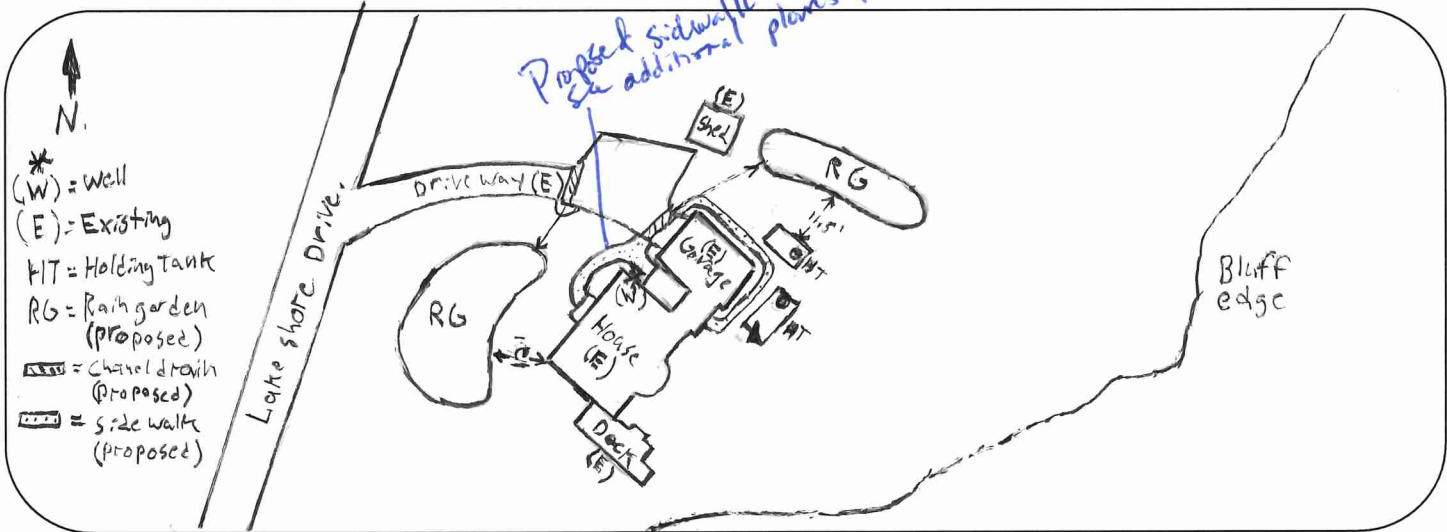
(*) Driveway and (*) Frontage Road (Name Frontage Road)
- (4) Show:

All Existing Structures on your Property
- (5) Show:

(*) Well (W); (*) Septic Tank (ST); (*) Drain Field (DF); (*) Holding Tank (HT) and/or (*) Privy (P)
- (6) Show any (*):

(*) Lake; (*) River; (*) Stream/Creek; or (*) Pond
- (7) Show any (*):

(*) Wetlands; or (*) Slopes over 20%



Please complete (1) – (7) above (prior to continuing)

Changes in plans must be approved by the Planning & Zoning Dept.

- (8) **Setbacks:** (measured to the closest point)

Description	Setback Measurements		Description	Setback Measurements	
Setback from the Centerline of Platted Road	91	Feet	Setback from the Lake (ordinary high-water mark)	177, 131	Feet
Setback from the Established Right-of-Way	69	Feet	Setback from the River, Stream, Creek	N/A	Feet
			Setback from the Bank or Bluff	100, 99	Feet
Setback from the North Lot Line	69	Feet			
Setback from the South Lot Line	25	Feet	Setback from Wetland	112	Feet
Setback from the West Lot Line	187	Feet	20% Slope Area on the property	X Yes <input type="checkbox"/> No	
Setback from the East Lot Line	99	Feet	Elevation of Floodplain	N/A	Feet
Setback to Septic Tank or Holding Tank	11.5	Feet	Setback to Well	19	Feet
Setback to Drain Field		Feet			
Setback to Privy (Portable, Composting)		Feet			

Prior to the placement or construction of a structure within ten (10) feet of the minimum required setback, the boundary line from which the setback must be measured must be visible from one previously surveyed corner to the other previously surveyed corner or marked by a licensed surveyor at the owner's expense.

Prior to the placement or construction of a structure more than ten (10) feet but less than thirty (30) feet from the minimum required setback, the boundary line from which the setback must be measured must be visible from one previously surveyed corner to the other previously surveyed corner, or verifiable by the Department by use of a corrected compass from a known corner within 500 feet of the proposed site of the structure, or must be marked by a licensed surveyor at the owner's expense.

- (9) **Stake or Mark Proposed Location(s)** of New Construction, Septic Tank (ST), Drain field (DF), Holding Tank (HT), Privy (P), and Well (W).

NOTICE(s): All Land Use Permits Expire One (1) Year from the Date of Issuance if Construction or Use has not begun.
For the Construction of New One & Two Family Dwelling: ALL Municipalities Are Required To Enforce The Uniform Dwelling Code.
The local Town, Village, City, State or Federal agencies may also require permits.

If subject property is part of a Condominium Plat, applicant hereby certifies and represents that applicant has all necessary approvals and recorded documents required to complete the project for which this permit is sought including requirements set forth in Wisconsin statutes pertaining to condominium associations, the Declaration of the Condominium Association in which the property is located, and all other rules, regulations and requirements pertaining to that Condominium Association.

You are responsible for complying with state and federal laws concerning construction near or on wetlands, lakes, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the department of natural resources wetlands identification web page or contact a department of natural resources service center (715) 685-2900.

Issuance Information (County Use Only)	Sanitary Number: 19-92s	# of bedrooms:	Sanitary Date: 8.21-19
Permit Denied (Date):	Reason for Denial:		
Permit #: 21-0243	Permit Date: 7-29-21		
Is Parcel a Sub-Standard Lot Is Parcel in Common Ownership Is Structure Non-Conforming	<input type="checkbox"/> Yes (Deed of Record) <input type="checkbox"/> Yes (Fused/Contiguous Lot(s)) <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	Mitigation Required Mitigation Attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Granted by Variance (B.O.A.) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Case #:	Previously Granted by Variance (B.O.A.) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Case #:
Was Parcel Legally Created Was Proposed Building Site Delineated	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Were Property Lines Represented by Owner Was Property Surveyed	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Inspection Record: owner on-site and explained project and locations. Appears code compliant.	Zoning District (R1) Lakes Classification (1)		
Date of Inspection: 7-20-21	Inspected by: Todd Norwood	Date of Re-Inspection:	
Condition(s): Town, Committee or Board Conditions Attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No – (If No they need to be attached.) use best management practices during project to minimize erosion of disturbed area Revegetate disturbed areas following grading and as proposed in project description.			
Signature of Inspector: Todd Norwood			Date of Approval: 7.29.21
Hold For Sanitary: <input type="checkbox"/>	Hold For TBA: <input type="checkbox"/>	Hold For Affidavit: <input type="checkbox"/>	Hold For Fees: <input type="checkbox"/>

TOWN BOARD RECOMMENDATION -- (CLASS A - SPECIAL USE)

Residence in Ag-1 or F-1; Shoreland Grading; Short-Term Rental (1 unit); Signage; RV Ext

When **Town Board** has completed this form, please mail to:

Bayfield County Planning and Zoning Department
P.O. Box 58 – Washburn, WI 54891
Phone – (715) 373-6138
Fax – (715) 373-0114
e-mail: zoning@bayfieldcounty.org

Website:
www.bayfieldcounty.org/147

Date Zoning Received (Stamp Here)

JUL 27 2021

Bayfield Co.
Planning and Zoning Agency



Property Owner(s) are responsible to give this form to the Town Clerk. Attach a copy of the County Application (8 1/2 x 14) [front/back]. This is a **Class A** special use request. **Note:** The Town's Planning Commission meets prior to the Town. Once the Town meets they will forward their recommendation to the Planning and Zoning Department. Ask Town if you should be present at their meeting(s).

Property Owner Robert Arquette + Nancy Hanson Contractor Bay Area Environmental Consulting

Property Address 73900 Lakeshore Drive Authorized Agent na

Washburn (Barrdale - physical address) Agent's Telephone _____

Telephone 715-292-8030 Written Authorization Attached: Yes () No ()

Accurate Legal Description involved in this request (specify only the property involved with this application)

____ 1/4 of ____ 1/4, Section 18, Township 48 N., Range 04 W. Town of Barrdale

Govt. Lot 1 Lot ____ Block ____ Subdivision ____ CSM# ____

Volume ____ Page ____ of Deeds Tax I.D# 55 Acreage 2.09

Additional Legal Description: _____

Applicant: (State what you are asking for) Zoning District: R-1 Lakes Classification _____

We are asking for approval by the Board of a shoreline re-grading project for our property (see attached BAEC proposal) that is to improve drainage and mitigate erosion.

We, the Town Board, TOWN OF Barrdale, do hereby recommend to

☐ Table

☒ Approval

☐ Disapproval

Have you reviewed this for Compatibility with the Comprehensive and/or Land Use Plan: ☐ Yes ☐ No

Township: (In detail clearly state Town Board's reason for recommendation of tabling, approval or disapproval)

Complies with comp. plan, helps with shoreline erosion

** THE FOLLOWING **MUST** BE INCLUDED WITH THIS FORM:

1. The Tabled, Approval or Disapproval box checked
2. The Town's reasoning for the tabling, approval or disapproval
3. The form returned to Zoning Department **not a copy or fax**

**** NOTE:**

Receiving Town Board approval, **does not** allow the start of construction or business, you **must** first obtain your permit card(s) from the Planning and Zoning Department.

Revised: August 2018

u/forms/townboardrecommendation-ClassA

Signed:

Chairman: John Nizara

Supervisor: Gregory P. Goff

Supervisor: Chris Brunning

Supervisor: Angela Truckee

Clerk: Angela Truckee

Date: July 13, 2021

Barksdale Plan Commission
Permit Application Review
Recommendation to Barksdale Town

Property Owner: Robert Asquette and Nancy Hanson

Property Address: 73900 Lake Shore Drive Washburn WI. 54891

Request: Class A Special Use Permit for Skid Steer grading permit for Retention Pond

(See attached permit application from Bayfield County)

Following review for consistency with the Barksdale Comprehensive Plan on July 13, 2021. We, the Plan Commission, Town of Barksdale, by majority vote, do hereby recommend the Permit Application for

☒ Approval

☐ Disapproval

For the following reasons:

This would help protect their home from storm water run off entering their garage and the entry of the home. Would also slow storm water runoff into Lake Superior

Signed:

July 13, 2021 (Date)

Susan E. Jacobson
Susan Jacobson, Chairman

Mike Bark
Mike Bark, Vice Chairman

Jayson P. Nohl
Jayson Nohl, Secretary

John Ganske
John Ganske

Lynn Divine
Lynn Divine

John Nyara
John Nyara

Robert Sanger
Robert Sanger

Town of Barksdale

Application Review for consistency with the Comprehensive Plan

Applicant: Robert Augerette & Nancy Hanson Date: July 12, 2021

A. Gather Facts

What is the request? Class A Special Use Permit

Existing Zoning R-1

Intent of the zoning

Classification

Parcel Size 1.76 ACRES

Existing conditions: Slopes Towards Lake Superior

Existing features on Site

Buildings: shed

Sanitary: Holding Tanks

Existing conditions on site

- Natural features Water Lake Superior
- Land Cover Tree grass, small shrubs
- Topography Slopes toward Lake Superior

Surrounding Conditions of note

Other

B. Evaluate the request

using The Comprehensive

Plan Elements

Does the request support the goals?

Are there conflicts with the goals?

1. Housing	<u>Yes</u>	<u>No Conflict</u>
2. Economic Development	<u>Yes</u>	<u>No Conflict</u>
3. Utilities & Community Facilities	<u>N.A.</u>	<u>No Conflict</u>
4. Agriculture Resources	<u>N.A.</u>	<u>No Conflict</u>
5. Natural Resources	<u>Yes</u>	<u>No Conflict</u>
6. Cultural Resources	<u>N.A.</u>	<u>No Conflict</u>
7. Transportation	<u>N.A.</u>	
8. Intergovernmental Relations	<u>N.A.</u>	
9. Future Land Use Map	<u>N.A.</u>	
10. Natural Resource Sensitive Areas	<u>Yes</u>	<u>Conflict</u>

C. Suggestions Can you

Suggest something that would

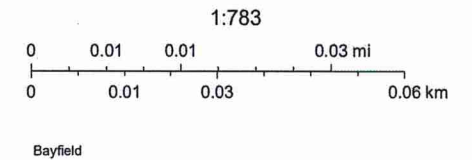
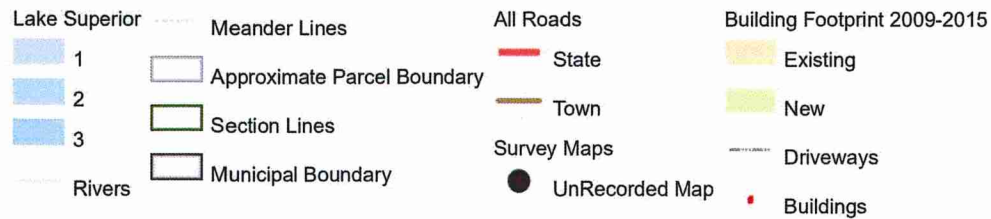
Achieve a Plan goal as this

Permit is processed? would help save the home and keep large amounts of run off into Lake Superior

Bayfield County, WI



7/29/2021, 12:09:33 PM



THE ORDINARY HIGH WATER LINE OF LAKE SUPERIOR IS APPROXIMATE AND FOR REFERENCE ONLY.

MEANDER CORNER
SEC. 18
1" IRON PIPE

ANY LAND BELOW THE ORDINARY HIGH WATER LINE OF A LAKE OR A NAVIGABLE STREAM IS SUBJECT TO THE PUBLIC TRUST IN NAVIGABLE WATERS THAT IS ESTABLISHED UNDER ARTICLE 1, SECTION IX, OF THE STATE CONSTITUTION.

A TITLE COMMITMENT WAS NOT PROVIDED BY THE CLIENT AND A TITLE SEARCH WAS NOT PERFORMED BY NELSON SURVEYING, INC.

THE SURVEYED PARCEL IS SUBJECT TO RIGHTS OF WAY, RESTRICTIONS, RESERVATIONS AND EASEMENTS THAT MAY EXIST THROUGH UNRECORDED MEANS OR RECORDED DOCUMENTS.

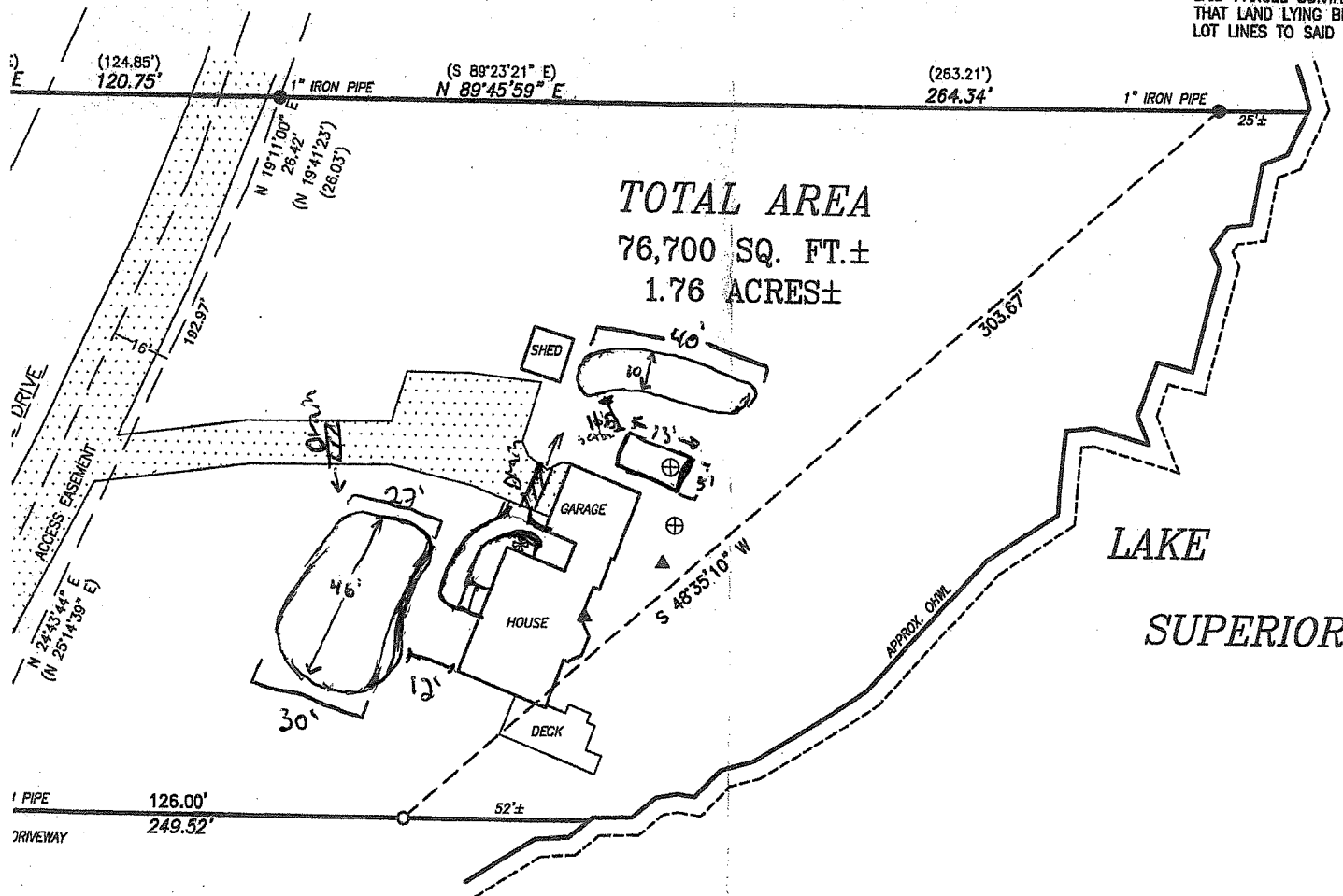
BEARINGS ARE BASED ON THE
NORTH LINE OF SECTION 18,
BEING N 89°46'53" E

LINE OF STATE HIGHWAY NO. 13, WHICH IS THE POINT OF BEGINNING.

THENCE FROM SAID POINT OF BEGINNING BY METES AND BOUNDS:

LEAVING SAID EASTERLY RIGHT OF WAY LINE, N 89°46'03" E, 120.75 FEET TO A 1" IRON PIPE. 1 N 89°45'59" E, 264.34 FEET TO A 1" IRON PIPE MEANDER CORNER THAT IS S 89°45'59" W, 25 1 LESS, FROM THE ORDINARY HIGH WATER LINE (OHWL) OF LAKE SUPERIOR. THENCE ON A MEANDE SAID OHWL, S 48°35'10" W, 303.67 FEET TO A 1" IRON PIPE MEANDER CORNER THAT IS S 89°48' FEET, MORE OR LESS, FROM SAID OHWL. THENCE LEAVING SAID MEANDER LINE, S 89°48'25" W, ; TO A 1" IRON PIPE ON SAID EASTERLY RIGHT OF WAY LINE. THENCE ON SAID EASTERLY RIGHT O N 24°43'44" E, 220.36 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 76,700 SQUARE FEET, MORE OR LESS, WHICH IS 1.76 ACRES MORE OR LI THAT LAND LYING BETWEEN THE MEANDER LINE AND THE OHWL OF LAKE SUPERIOR AND THE EXTE LOT LINES TO SAID OHWL.



SURVEYOR'S CERTIFICATE

I, PETER A. NELSON, PROFESSIONAL LAND SURVEYOR IN THE ST. WISCONSIN, HEREBY CERTIFY:

THAT ON THE ORDER OF ROBERT ARQUETTE, I HAVE SURVEYED, MAPPED A PARCEL OF LAND LOCATED IN GOVERNMENT LOT 1, S T. 48 N., R. 4 W., IN THE TOWN OF BARKSDALE, BAYFIELD COU WISCONSIN;

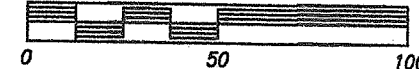
THAT THIS MAP IS A TRUE REPRESENTATION OF SAID SURVEY;

THAT SAID SURVEY AND MAP FULLY COMPLY WITH THE PROVISIONS OF CHAPTER A-E OF THE WISCONSIN ADMINISTRATIVE CODE; AND

THAT SAID SURVEY AND MAP ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

PETER A. NELSON
PLS. # 5071
ASHLAND, WI
LAND SURVEYOR

SCALE: 1 INCH = 50 FEET



CLIENT: ARQUETTE, R.

NELSON
SURVEYING
INCORPORATED

SURVEYING YOUR NECK OF THE WOODS SINCE 1954

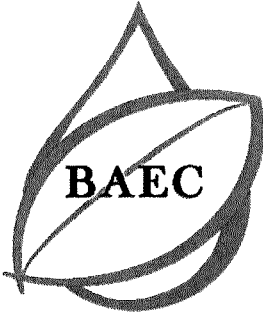
SEPTIC COVER
SEPTIC VENT
WELL
BITUMINOUS SURFACE

JOB NO.: N20/032
DRAFTED BY: P. NELSON
JUNE 22, 2020
NB: 423 PG. 17
FIELD WORK COMPLETED: MAY 26, 2020

SCALE: 1 INCH = 50 FEET
FILE:N/T48NR4W/SEC18/
ACAD/N20_032 ARQUETTE
PSDATA/N20_032

101 W
SUITE
ASHLA
(715)
FAX: (

MA



Bay Area Environmental Consulting LLC:
Po Box 308 Washburn, WI 54891

**Owner: Robert Arquette
and Nancy Hanson
Location: 73900 Lake Shore Dr.
Washburn WI
Updated 6/25/2021**

Stormwater Management

This is the second version created after ground truthing the initial design. Changes were made to the position of the rain gardens, sidewalks, and retaining walls.

Project Objectives:

Primary objective is to redirect stormwater away from the house, garage, and breeze way. This primary objective can be completed by channel drains, gutter positioning, and recontouring portions of the yard to shed water properly. Two infiltration basins are designed to infiltrate and contain stormwater to avoid pooling. These two infiltration basins will be located on the North and West sides of the house.

Areas of concern are in front of the garage and in the breeze way between the house and garage. The garage receives stormwater runoff of the driveway and parking lot without interception. Based on the initial survey, the breezeway receives water by direct rain fall. Current topography sheds water towards the foundation of the breeze way. The main body of the house sheds water to the front lawn via the gutter system. Overall water does shed to a suitable area from this portion of the house and to where we propose an infiltration basin.

Suggested Stormwater Infrastructure:

To divert stormwater off the driveway and parking lot, we suggest channel drains be installed into the driveway just before the parking lot area and in front of the garage. These devices are metal, plastic or cement structures placed into cut pathways in the asphalt of the driveway to intercept water running down this surface. These channels can be diverted into vegetated areas or through a French drain which will then feed the infiltration basins. Where these channels enter the vegetated areas or infiltration basins, small stone aprons should be built to disperse energy of the storm water.

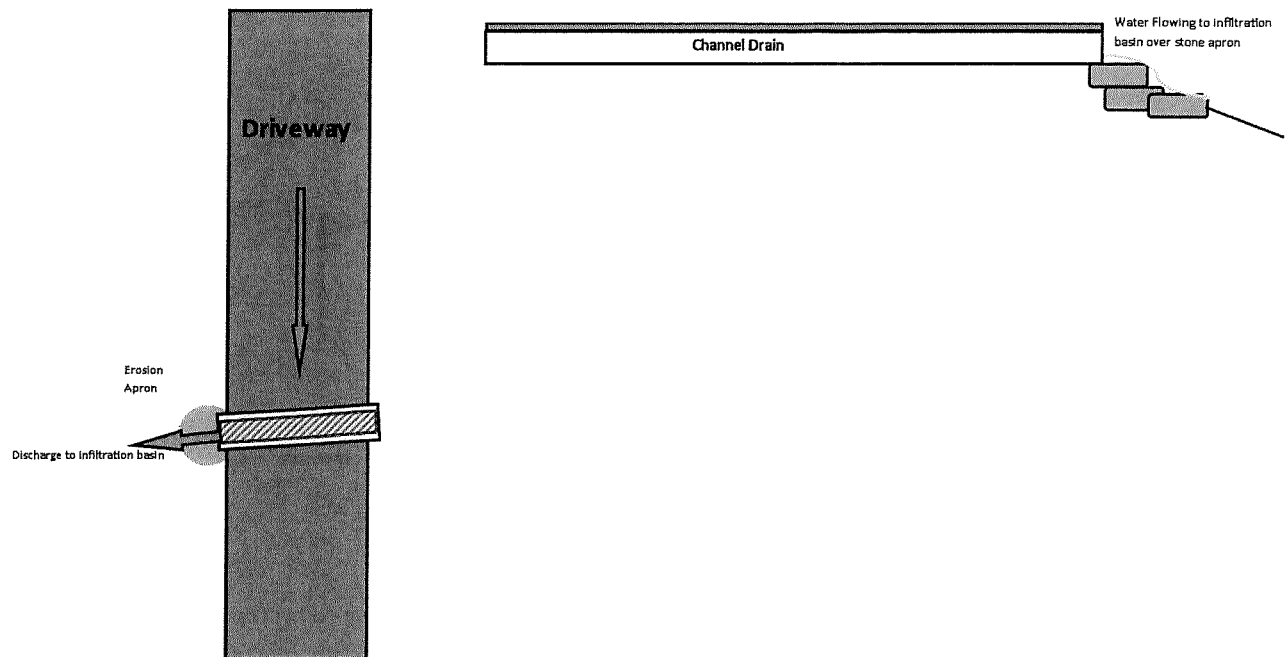


Figure1.- Above diagrams illustrate installation of channel drains in front of garage and in driveway.

Currently the residency has gutter systems installed and are shedding water appropriately. These can be adjusted to feed the infiltration basins.

Regrading:

Currently the ground level is at or just below the siding of the house on the West wall. This can cause moisture issues and has covered over several windows to the basement. It is proposed to drop the ground level 6" from the current elevation to keep moisture away from the siding. Once this ground level is dropped, the ground will be evenly regraded towards the infiltration basin to the west of the house.

There is a hump or point of higher elevation between the breezeway and the proposed site of the infiltration basin that is focusing and trapping stormwater in the breezeway area. This will be smoothed and graded to flow water towards the infiltration basin. Coupled with this regrading, we suggest a poured concrete slab as an entry to the breezeway door which would enable this area to shed water away from the house without serious digging. This area does have several utility lines present (see Figure 4).

Infiltration Basins:

The primary purpose of these installations is to infiltrate and hold water away from the house and avoid standing water and saturated turf. Basins will be large excavations which are then back-filled with gravel and sand, very permeable materials, and topped off with topsoil to provide a growing media for wet-adapted native plant species that will hold soil, transpire water, provide habitat and aesthetic value.

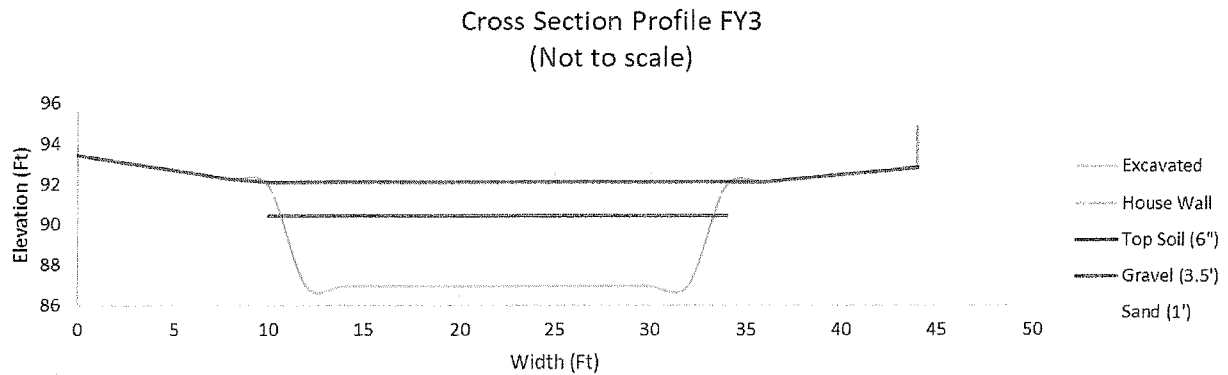


Figure 2.- Above Diagram Illustrates cross section of infiltration basin on West side of the house.

Table 1.- Table showing holding capacities and volumes of fill.

	West Basin	North Basin
Watershed (ft ²)	4907	4347
Length (ft)	46	40
Width (ft)	26	12
Depth (ft)	6	5
Volume (yd ³)	266	89
Gravel (yd ³)	155	62
Sand (yd ³)	44	18
Topsoil (yd ³)	22	9
Apron Topsoil (yd ³)	6	8
Total Topsoil	29	17
Holding Capacity (yd ³)	106	36

Technical Assumptions

We assume that no more than 15" of rain will fall in 3 days at this site and that markings of utilities by Digger Hotline will be accurate to provided specifications. We assume (and ensure) that volumes and dimensions of excavated basins will be within 2.5% of planned dimensions. Plans may be shifted up to 2 feet horizontally as digging occurs with permission from landowner. We ensure that depths and overall volume will be consistent with proposed design.

Property Design Layout

Below are multiple schematics depicting proposed stormwater infrastructure in relation to the house and driveway.

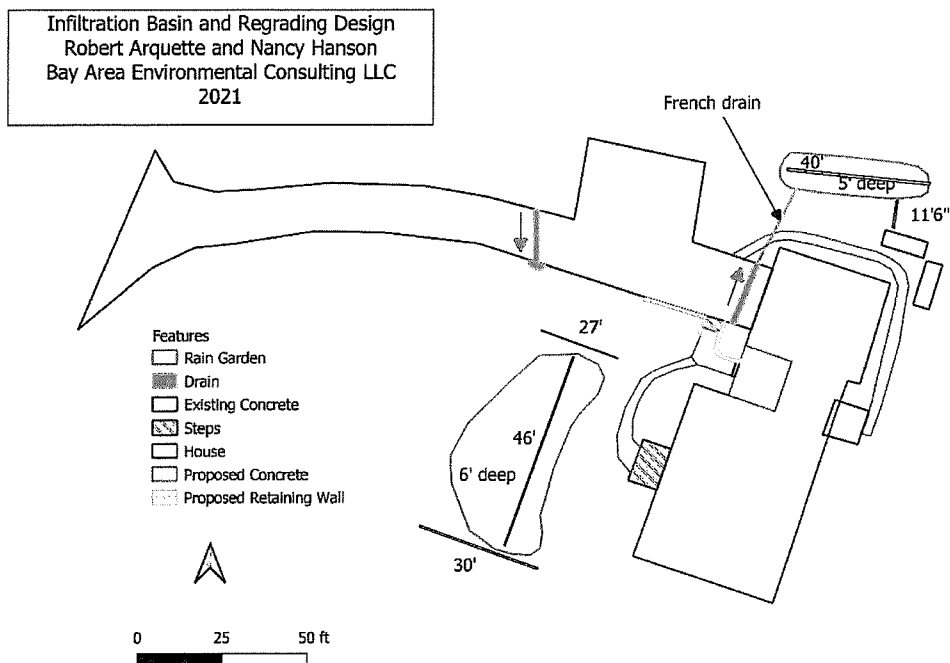


Figure 3.- Proposed layout of stormwater infrastructure and concrete structures.

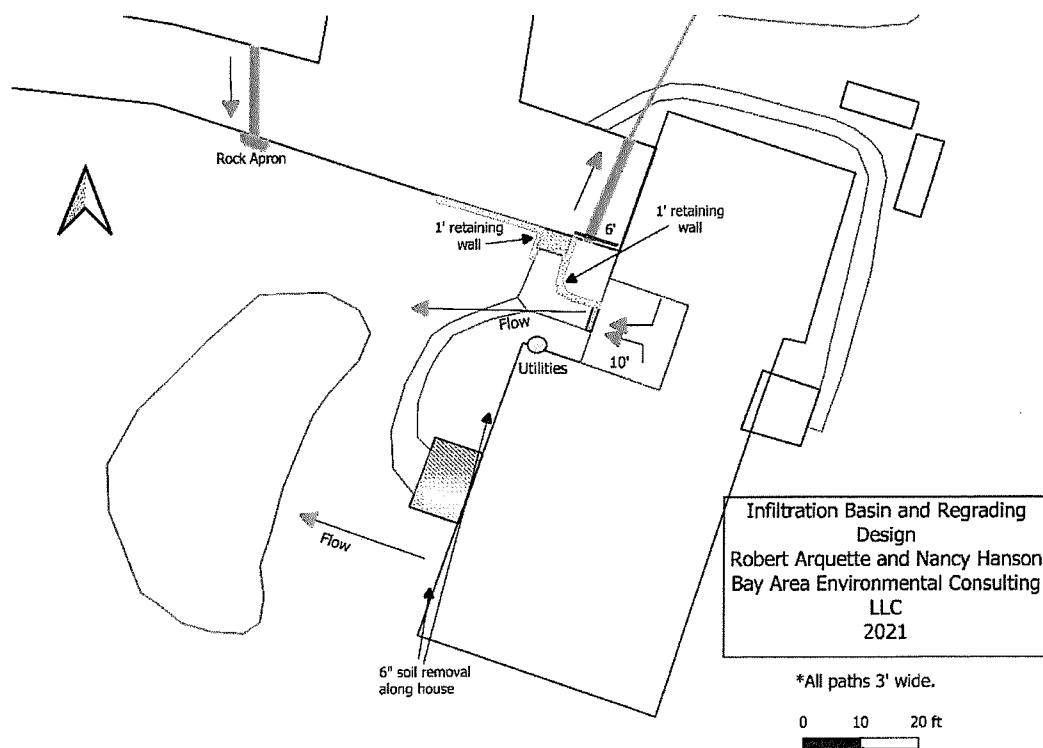


Figure 4.- Zoomed in schematics showing more detailed measurements near the breezeway and flow directions of storm water surrounding concerned area of house.

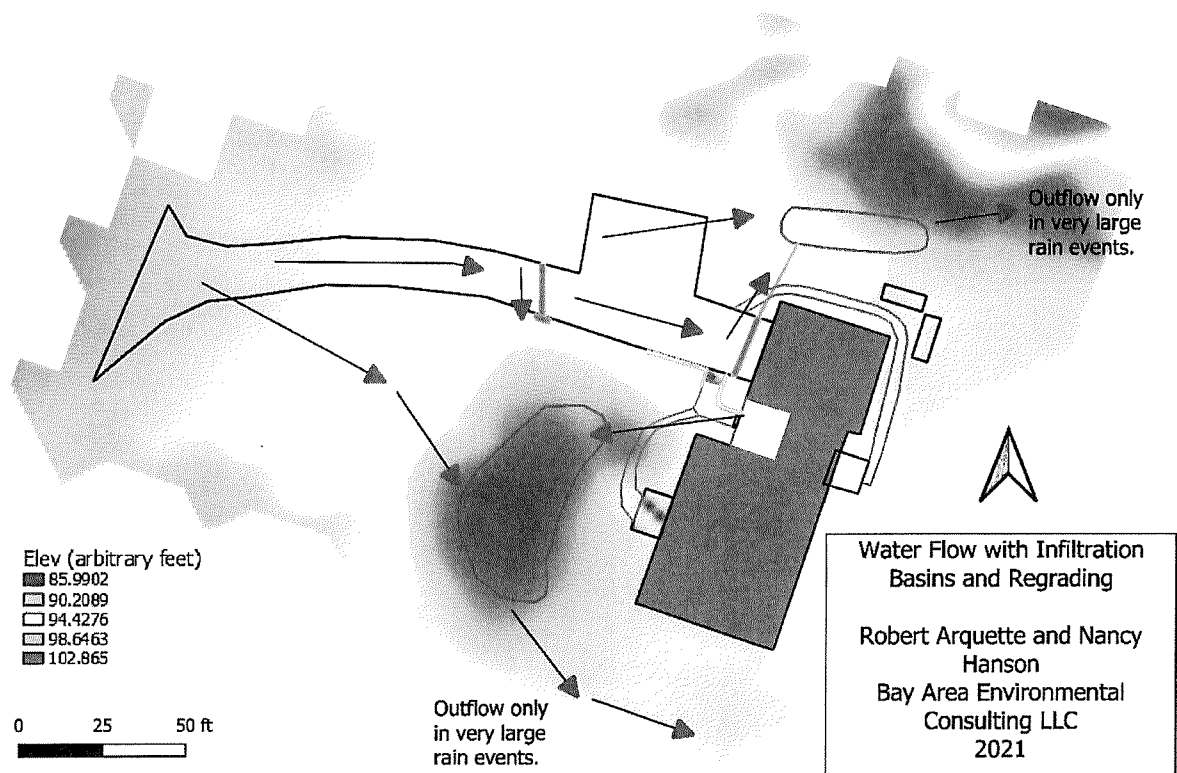


Figure 5.- Elevation maps derived from survey of property. Blue arrows show project site water flow after the installation of proposed infrastructure. Please note that the red “mound” to the north of the north infiltration basin is an artefact of the computer algorithm working near the edge of our data and will not be present in the actual construction.

Vegetation

Plants help to slow water flow, hold soil, and transpire moisture into the air, complementing the runoff control structures detailed above. In all disturbed areas, revegetation will be important to prevent erosion and minimize maintenance in the future. Additionally, we propose some forest management to replace much of the aspen and poorly performing spruce with long-lived conifer species and red oak. Conifers intercept rain as it falls, slow snow melt, and build thick, porous soils. Conifers are useful to slow water flow across watersheds and many species are underrepresented on the landscape, compared to their historic numbers.

Infiltration basin revegetation

Infiltration basins work best when covered with wet-adapted native species which can transpire water from the soil to the air. These basins provide an additional opportunity to use native species which are helpful to pollinators and are aesthetically pleasing. Seeding is the most cost-effective way to plant and is generally best done in the fall (October or early November) or in the early spring (March to May). Fall broadcast seedings are preferred for some species as they germinate only after being frozen for a

winter. The seed would be raked and stomped into the ground to ensure good soil contact and then covered with straw.

Weeding would be necessary for the first few years after establishment. Other maintenance should be low, as these are perennials and mimic a natural community.

The proposed seed mix (below) would be widely tolerant of environmental conditions and includes a mix flowers, sedges, and grasses.

Flowers

Nodding Pink Onion, Red Milkweed, New England Aster, White False Indigo, Joe Pye Weed, Boneset, Dogtooth Daisy, Ox Eye Sunflower, Blue Flag Iris, Cardinal Flower, Great Blue Lobelia, Bergamot, Wild Quinine, Smooth Penstemon, Yellow Coneflower, Black Eyed Susan, Green Headed Coneflower, Black and Brown Eyed Susan, Wild Senna, Ohio Goldenrod, Stiff Goldenrod, Blue Vervain, Ironweed, Golden Alexanders

Grasses and Sedges

Bottlebrush Sedge, Porcupine Sedge, Awl Fruited Sedge, Fox Sedge, Canada Wild Rye, Virginia Wild Rye, Dark Green Bulrush, Woolgrass

Around the infiltration basins where regrading will occur, we propose planting no-mow grass. This seed mix is blend of fescues which only need to be mowed 1-2 times per year. The grass will grow to be 6-8" tall and then fall horizontal. Fescues root deeply, helping to slow water flow and improve the watershed.

Alcove near breezeway

The area around the breezeway would be mostly concrete, leading to warmer daytime temperature in the surrounding area. Exposed soil will be left at the corner of the garage near the 1' retaining wall in Figure 4. In this area, we propose to plant 2 common junipers, a low growing native juniper, to provide color in front of the concrete. It is drought, heat, and salt tolerant, making it a good choice for next to a driveway and other concrete structures.

Swale

This is the low-lying channel draining the west infiltration basin past the deck. This area will likely remain moist except during droughts and wet periodically during large rain events. Because this area drains to the cliff edge, it is important that any plantings slow water flow while also providing the desired aesthetics. The species of rushes and shrubs that we include in Table 2 would provide year-round color and are wet tolerant. The white meadowsweet may need to be watered during the dry summer months.

Cliff Edge

Erosion rates are low on the lake bluff, but there are areas where more shrubs and trees could be planted to help prevent future erosion and ensure a healthy forest. We suggest arrowwood viburnum, a widely tolerant native shrub, in areas that are in the line-of-sight to the lake. It does not grow tall and has a beautiful leaf and form. In areas where you do not need to see the lake, we suggest planting white cedar. Historically, white cedar was a dominant tree along the lakeshore and is excellent at holding and building soils.

Forest Management

Aspen and spruce will be selectively removed to protect the house from damage and create natural canopy openings. Specifically, a poplar which is leaning toward the garage and possibly some red maple in the same area will be removed. A 50% reduction of spruce and mature poplar west of the house and south of the driveway will be done. These poplar and spruce are growing densely, leading to weak trees which are prone to falling in storms. BAEC will select the healthiest individuals to keep and mark them for landowner review.

We suggest planting 80 trees into these created openings and any natural canopy openings. Species should include white cedar, hemlock, red oak, and white pine. All of these are long-lived species which are typically found near Lake Superior. These species, especially hemlock and white cedar, are browsed by deer in the winter, so a deer repellent (such as Plantskydd) should be applied each fall for at least 5 years. These plantings would increase the species and age diversity of the forest, making it more disease resistant and encouraging wildlife to use the area. Planting young trees would also complement the stormwater runoff control structures because trees intercept rainfall and slow water movement through the soil.

There are a few scattered invasive buckthorn and honeysuckle individuals. These should be cut down and the stumps should be treated with herbicide (15% triclopyr 4 for buckthorn, 20% glyphosate for honeysuckle. Any that resprout or come up from the seedbank should be treated with a foliar spray two years after the initial cutting. The site should then be monitored for future treatment need.

Screening along Lakeshore Drive

The landowners stated that they would like privacy plantings along Lakeshore Drive. White cedar (*arbor vitae*) has dense growth and when planted closely provides good screening. We suggest also planting some flowering shrubs (highbush cranberry and serviceberry) in front of the screen to provide color accents and pollinator habitat.

Front (west) landscaping bed suggestions

We would be happy to provide detailed suggestions for landscaping in the beds near the house after further conversation with you. This may best be planned once the forest thinning is completed so that we can see the change in light availability. For the moment, we have included below shade tolerant species for the west side of the house.

Assumptions

We assume that survival of plantings will be 70% or higher except when exposed to extreme drought, flooding, disease, or deer browse. Actions will be taken to mitigate these effects by planting at the right time, in the most suitable locations, at the correct densities, and using tools like deer repellent. We also assume that stock provided to us by the nursery is healthy and a condition considered normal by the commercial nursery industry.

Table 2. – Proposed plant selection. Projected costs do not include tax or shipping. A final cost estimate will be calculated once plants and timing are finalized.

Location	Item	Amount
Rain garden	Moist meadow rain garden seed	0.5 lb
	No mow lawn seed mix	30 lb
	Straw	10 bales
Alcove	Common juniper (2 gallon)	2
Swale	Winterberry holly (12-24")	6
	Meadowsweet (2 gallon)	3
	Common rush (plugs)	18
	Path rush (plugs)	18
Screening	White cedar (3 year)	8
	White cedar (5 gallon)	4
	Serviceberry (12-24")	2
	Highbush cranberry (6-12")	2
Forest floor	White cedar (2 year)	20
	Hemlock (2 year)	20
	Red oak (12-24")	20
	White pine (2 year)	20
Cliff edge	White cedar (2 year)	12
	Arrowwood viburnum (6-12")	10
Front bed suggestions	Evergreen wood fern	
	Trout lily	
	Blue bead lily	
	Starflower	
	Canada mayflower	
	Chokeberry	
	Japanese yew	
	Pea gravel between plants	

Real Estate Bayfield County Property Listing

Today's Date: 7/29/2021

Property Status: Current

Created On: 3/15/2006 1:14:41 PM

**Description**

Updated: 8/6/2019

Tax ID: 55
PIN: 04-002-2-48-04-18-2 05-001-40000
 Legacy PIN: 002100503000
 Map ID:
 Municipality: (002) TOWN OF BARKSDALE
 STR: S18 T48N R04W
 Description: 3 PAR IN GOVT LOT 1 IN DOC 2019R-578450
 Recorded Acres: 2.090
 Calculated Acres: 2.092
 Lottery Claims: 1
 First Dollar: Yes
 Zoning: (R-1) Residential-1
 ESN: 103

**Tax Districts**

Updated: 3/15/2006

1	STATE
04	COUNTY
002	TOWN OF BARKSDALE
046027	SCHL-WASHBURN
001700	TECHNICAL COLLEGE

**Recorded Documents**

Updated: 7/8/2013

WARRANTY DEED

Date Recorded: 7/30/2019

2019R-578450**CONVERSION**

Date Recorded: 3/15/2006

287-244;462-305;657-240

**Ownership**

Updated: 8/6/2019

ROBERT E ARQUETTE
NANCY J HANSON

WASHBURN WI
 WASHBURN WI

Billing Address:

**ARQUETTE, ROBERT E &
 HANSON, NANCY J**
 73900 LAKE SHORE DR
 WASHBURN WI 54891

Mailing Address:

**ARQUETTE, ROBERT E &
 HANSON, NANCY J**
 73900 LAKE SHORE DR
 WASHBURN WI 54891

**Site Address** * indicates Private Road

73900 LAKE SHORE DR

WASHBURN 54891

**Property Assessment**

Updated: 6/24/2021

2021 Assessment Detail

Code	Acres	Land	Imp.
G1-RESIDENTIAL	2.090	199,900	124,100

2-Year Comparison	2020	2021	Change
Land:	167,900	199,900	19.1%
Improved:	95,500	124,100	29.9%
Total:	263,400	324,000	23.0%

**Property History**

N/A

Town, City, Village, State or Federal
Permits May Also Be Required

LAND USE – **X**
SANITARY –
SIGN –
SPECIAL – **Class A**
CONDITIONAL –
BOA –

BAYFIELD COUNTY

PERMIT

WEATHERIZE AND POST THIS PERMIT
ON THE PREMISES DURING CONSTRUCTION

No. **21-0243** Issued To: **Robert Arquette & Nancy Hanson**

Location: - $\frac{1}{4}$ of - $\frac{1}{4}$ Section **18** Township **48** N. Range **4** W. Town of **Barksdale**

3 Par in

Gov't Lot **1** Lot Block Subdivision CSM#

For: **Residential Other:** [Grading Pond 1 (30' x 46') = 1,380 sq. ft.; Grading Pond 2 (10' x 40') = 400 sq. ft.;
Sidewalk (60' x 3') = 180 sq. ft.; Channel Drains (40' x 3') = 120 sq. ft.]

(Disclaimer): Any future expansions or development would require additional permitting.

Condition(s): Use best management practices during project to minimize erosion of disturbed area.
Revegetate disturbed area following grading and as proposed in project description.

You are responsible for complying with state and federal laws concerning construction near or on wetlands, lakes, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the department of natural resources wetlands identification web page or contact a department of natural resources service center (715) 685-2900.

NOTE: This permit expires one year from date of issuance if the authorized construction work or work or land use has not begun.

Changes in plans or specifications shall not be made without obtaining approval. This permit may be void or revoked if any of the application information is found to have been misrepresented, erroneous, or incomplete.

This permit may be void or revoked if any performance conditions are not completed

or if any prohibitory conditions are violated.

Todd Norwood

Authorized Issuing Official

July 29, 2021

Date